patients undergoing CPR and by those left untreated through spent opportunity costs. This serves as a reminder that the technological imperative – because existing technology means that something can be done, then this action ought to be done – must be thoughtfully considered by those undertaking health technology assessments.

PCV106

CREATING A QUALITY INDEX TO RANK HOSPITALS

Baser O

University of Michigan and STATinMED Research, Ann Arbor, MI, USA

OBJECTIVES: Utilize simple measures, such as mortality and hospital volume, to create and validate the composite quality score. Although payers are increasingly reporting information on hospital volume and mortality to rank hospitals, the value of these data is uncertain. There is a need for better quality measures. **METHODS:** We used Medicare Analysis Provider and Review files for resection of pancreatic cancer (2003–06). Using the empirical Bayes approach to combine mortality rates with information on hospital volume at each hospital, we created an index to weight observed mortality according to how reliable it is estimated, with the remaining weight placed on hospital volume. We validated our index by a) establishing the extent to which it explained hospital-level variation in risk adjusted mortality rates, and b) determining how well it predicted future hospital performance. **RESULTS:** Since the average hospital caseload was only 6, 16% of the weight was placed on mortality and 84% on volume. Composite measure explained the highest percentage of hospital level variation (54%) and predicted the largest differences in future risk adjusted mortality across hospitals (odd ratio = 3.16, p = 0.000). **CONCLUSIONS:** Using national Medicare data for resection of pancreatic cancer, we found that simple composite measure was a strong predictor of subsequent performance of the operation. In this regard, it was more effective than individual measures. Such measures would be useful to help patients and payers identify low quality hospitals for major surgery.

PCV107

SPECIFICITY OF ADMINISTRATIVE DATA FOR IDENTIFYING HEART FAILURE PATIENTS FOR HOSPITAL QUALITY PERFORMANCE INITIATIVES

Bautista A[1], Stein BD[2], Lee TA[3], Meltzer DO[2], DiDomenico R[1], Krishnan JA[2], Schumock GT[1]

[1]University of Illinois at Chicago, Chicago, IL, USA, [2]University of Chicago, Chicago, IL, USA, [3]Hines VA Hospital and Northwestern University, Chicago, IL, USA

OBJECTIVES: Administrative data are often used to identify patients for inclusion in quality performance measures. We examined the specificity of ICD-9 codes from administrative data for identifying patients hospitalized for heart failure (HF). **METHODS:** Charts of 90 adults (≥25 years) admitted to two university hospitals between November 2005 and October 2006 were selected on the basis of ICD-9 discharge diagnosis [primary diagnosis of HF (n = 45), or without HF (n = 45)]. The ICD-9 codes used to identify HF were those used in the Joint Commission National Hospital Quality Measures. Medical charts were abstracted to identify the physician discharge diagnoses. Specificity was calculated by comparing the number of patients identified with HF via ICD-9 codes from administrative data to the number identified by medical record review [(true negatives/(true negatives + false positives)]. The main analysis was based on the reference standard being the physician primary discharge diagnosis of HF. In sensitivity analyses we expanded the definition of the reference standard to include; A) physician secondary discharge diagnosis of HF with shortness of breath (SOB) or respiratory failure (RF) as the primary diagnosis; and B) physician secondary discharge diagnosis of HF with SOB, RF, arrhythmia, or valvular disease as the primary diagnosis. **RESULTS:** The specificity of the administrative data was 75.0% (95% CI 62.1–85.3%) for the main analysis. Using the expanded definitions of the reference standard A and B above, the specificity was 77.6 % (95% CI 64.7–87.5 %) and 81.8% (95% CI 69.1–90.9%), respectively. **CONCLUSIONS:** Administrative data have relatively high specificity (>75%) for identifying hospitalized patients with heart failure. Additional analyses are needed to determine the extent to which quality among those captured by administrative data reflects overall quality, and to determine the sensitivity of administrative data for identifying HF patients.

PCV108

USE OF RENIN SYSTEM AGENTS AMONG HYPERTENSION PATIENTS WITH RENAL DISEASE IN A MANAED CARE SETTING

Stern L[1], Lamerato L[2], Ogbonnaya A[1], Hwa Ong S[3], Munk VC[3], Charney A[4]

[1]Analytica International, New York, NY, USA, [2]Henry Ford, Detroit, MI, USA, [3]Novartis Pharma AG, Basel, Switzerland, [4]Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA

OBJECTIVES: The objective of this study was to determine the likelihood of receiving renin system agents as the first HTN treatment among patients with prior renal disease. **METHODS:** This retrospective study utilized data from the Henry Ford Health System to identify HTN patients with renal disease who received a renin system agent at any time. Patients were >18 years old with a minimum of one year enrollment in the health plan of one year following the first HTN visit in the study period. The first HTN treatment was characterized as monotherapy or combination therapy with renin system agents. Logistic regression modeling determined the likelihood of receiving a renin system agent first line among patients diagnosed with renal disease before initiating HTN therapy compared to patients diagnosed with renal disease after initiating HTN therapy while adjusting for covariates. **RESULTS:** A total of 4,523 patients had a diagnosis of HTN and renal disease (mean age 64 years, 50% white and 54% male). Approximately 58% of patients were treated with two HTN agents and 42% with three or more. Only 338 (7.5%) patients were diagnosed with renal disease before their HTN treatment. Slightly higher proportions of patients diagnosed with renal disease before, compared to after initiating HTN therapy (59% vs. 51% respectively), were prescribed renin system agents first line. After adjusting for covariates, patients diagnosed with renal disease before initiating HTN therapy were not more likely to receive a renin system agent first-line compared to patients diagnosed with renal disease after initiating HTN therapy (OR: 0.863, 95% CI: 0.664–1.123). **CONCLUSIONS:** While all patients received renin system agents, those with prior renal disease were not more likely to receive this treatment first line suggesting an opportunity to optimize treatment for renal patients with medications that block the Renin-Angiotensin-Aldosterone System.

PCV109

THERAPY INTERRUPTIONS IN PATIENTS SWITCHED FROM BRANDED TO OTHER GENERIC STATINS

Chapman RH[1], Benner JS[1], Girase P[2], Benigno M[3], Axelsen KJ[3], Liu L[3], Nichol MB[4]

[1]IMS Health, Falls Church, VA, USA, [2]IMS Health, Watertown, MA, USA, [3]Pfizer Pharmaceuticals, New York, NY, USA, [4]University of Southern California, Los Angeles, CA, USA

OBJECTIVES: To compare dose-equivalence, adherence and subsequent switch rates among patients recently switched from a branded to generic version of the same statin (generic substitution, GS) vs. those switched from branded statin to generic version of a different statin (therapeutic substitution, TS). **METHODS:** In a retrospective cohort analysis among adult enrollees in ~90 US health plans, we identified adult patients who switched from a branded to generic statin from July-December 2006. Patients were classified by type of statin switch: GS (eg, branded simvastatin °ú generic simvastatin), and TS (eg, branded atorvastatin °ú simvastatin). Demographic and clinical data were collected from claims before switch through six months follow-up. Outcomes of interest included proportion of patients that switched to a less potent daily dose, that switched back to the previous branded statin after switch, and that were at least 80% adherent during the 6 months after initial switch. Significant predictors of each clinical outcome were identified using multivariable logistic regression models, adjusting for differences between groups in covariates and potential confounders. **RESULTS:** The TS (n = 3,807) and GS (n = 40,165) groups were generally similar demographically, although TS was more frequent in HMO health plans than GS (40.6% vs. 33.7%, p < .001), and less likely in POS plan patients (9.2% vs. 16.6%). Compared to GS, TS patients were more likely to be switched to a less potent dose (26.2 % vs. 0.5%); less likely to be adherent (70.2% vs. 79.5%); and more likely to switch back to the previous branded statin (11.3% vs. 2.9%, p < .001 for all). These effects remained significant in the regression models adjusting for demographic and baseline clinical characteristics. **CONCLUSIONS:** TS is more likely to involve a subsequent disruption to statin therapy than GS. TS could potentially lead to adverse impacts on patients' outcomes, and should be studied further.

PCV110

DO CANADIAN PHYSICIANS CORRECTLY IDENTIFY HIGH RISK CV PATIENTS?

Beamer B, Liovas A

AstraZeneca, Mississauga, ON, Canada

OBJECTIVES: Under estimating CV risk levels of patients may lead to inappropriate care and unintended clinical and economic consequences. It is not known to what extent Canadian physicians correctly identify the CV risk level of patients who have had previous CV events and/or a diagnosis of diabetes mellitus. **METHODS:** A total of 431 General Practioners from across Canada collected pre-specified data on a case record form (CRF) for CV patients during routine office visits between June 2007 and December 2007. Physicians were asked to assess the risk level of each patient during the completion of the CRF. Patients for whom the physician reported a diagnosis of diabetes mellitus (DM) and/or who had a previous history of myocardial infarction (MI), stroke (S), or peripheral artery disease (PAD) were extracted. Physician assessed risk levels were then compared to this subset of commonly accepted high-risk patients. **RESULTS:** Data on 14,982 patients was obtained. A total of 2822 had a previous history of MI, S, or PAD. Physicians correctly assessed 2540 (90.0%) as high risk, however differences were observed between provinces: BC 81.5%, AB 86.9%, QC 92.9%, ON 90.3%, NS 90.9%, NB 85.3%. A further 1850 had DM and a previous history of MI, S, or PAD. Physicians correctly assessed 1778 (96.1%) as high risk, however regional differences were observed: BC 87.5%, AB 89.6%, QC 98.5%, ON 97.0%, NS 94.4%, NB 97.7%. **CONCLUSIONS:** Despite agreement that patients with a previous history of MI, S, or PAD should be viewed as high risk, and that those with DM and a previous history of MI, S, or PAD are high risk, some physicians still under estimate the CV risk. The reasons for this under assessment and the unintended clinical and economic consequence need to be explored further.